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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,643	03/06/2006	George Coukos	555-88	7985

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EXAMINER	
DIBRINO, MARIANNE NMN	
ART UNIT	PAPER NUMBER
1644	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/525,643	COUKOS ET AL.	
	Examiner	Art Unit	
	DiBrino Marianne	1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *1* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-30* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, Applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

I. Claims 1-8, drawn to a polypeptide comprising the sequence of SEQ ID NO: 8 (Letal or ULBP4) or variant or fragment thereof,

II. Claims 9-18, drawn to an isolated nucleic acid molecule that encodes a polypeptide comprising the sequence of SEQ ID NO: 8 or variant or fragment thereof, or a nucleic acid molecule that is complementary thereto,

III. Claims 20 and 22, drawn to a therapeutic method comprising administering to a patient a polypeptide comprising the sequence of SEQ ID NO: 8 or variant or fragment thereof,

IV. Claim 21, drawn to a therapeutic method comprising administering to a patient a nucleic acid encoding a polypeptide comprising the sequence of SEQ ID NO: 8 or variant or fragment thereof, thereby introducing said nucleic acid into tumor cells of the patient,

V. Claim 23, drawn to an antibody specific for a polypeptide comprising the sequence of SEQ ID NO: 8 or variant or fragment thereof, or a binding fragment thereof,

VI. Claims 24 and 25, drawn to a polypeptide comprising the sequence of SEQ ID NO: 10 (predicted protein sequence of immune LCCR), or variant or fragment thereof,

VII. Claims 26-29, drawn to a nucleic acid molecule that encodes a polypeptide comprising the sequence of SEQ ID NO: 10, or variant or fragment thereof or to a nucleic acid complementary thereto, vector comprising said nucleic acid, host cell comprising the construct and method of producing a polypeptide comprising culturing the host cell to express the nucleic acid encoded protein,

VIII. Claim 30, drawn to an antibody specific for a polypeptide comprising the sequence of SEQ ID NO: 10, or variant or fragment thereof.

2. The inventions listed as Groups I-VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Claim 1 of the instant application does not provide a technical feature that is distinguished over the prior art, as evidenced by Geneseq Accession Number AAG68335 (IDS reference). Geneseq Accession Number AAG68335 teaches a polypeptide comprising a variant of SEQ ID NO: 8.

Therefore, the instant invention lacks Unity of Invention.

3. Claim 19 links inventions III and IV. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim, claim 19. Upon the allowance of the linking claim, the restriction requirement as to the linked inventions shall be withdrawn and any claim depending from or otherwise including all the limitations of the allowable linking claim will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim depending from or including all the limitations of the allowable linking claim is presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

4. This application contains claims directed to the following patentably distinct species:

(1) of Invention I: either SEQ ID NO: 8 or a variant of SEQ ID NO: 8 (for example, a variant that shares at least 70% identity with SEQ ID NO: 8) or fragment of SEQ ID NO: 8 (for example, the alpha-1 domain, or the alpha-2 domain, or about amino acid residues 29 to about 225 of SEQ ID NO: 8),

(2) of Invention II: a nucleic acid molecule that encodes either SEQ ID NO: 8 or a variant of SEQ ID NO: 8 (for example, a variant that shares at least 70% identity with SEQ ID NO: 8) or fragment of SEQ ID NO: 8 (for example, the alpha-1 domain, or the alpha-2 domain, or about amino acid residues 29 to about 225 of SEQ ID NO: 8),

(3) of Invention III: the following product to be used in the method of Invention III, either SEQ ID NO: 8 or a variant of SEQ ID NO: 8 (for example, a variant that shares at least 70% identity with SEQ ID NO: 8) or fragment of SEQ ID NO: 8 (for example, the alpha-1 domain, or the alpha-2 domain, or about amino acid residues 29 to about 225 of SEQ ID NO: 8),

(4) of Invention IV: the following product to be used in the method of Invention IV a nucleic acid molecule that encodes either SEQ ID NO: 8 or a variant of SEQ ID NO: 8 (for example, a variant that shares at least 70% identity with SEQ ID NO: 8) or fragment of SEQ ID NO: 8 (for example, the alpha-1 domain, or the alpha-2 domain, or about amino acid residues 29 to about 225 of SEQ ID NO: 8),

(5) of Invention V: an antibody or an antigen binding fragment thereof specific for a polypeptide comprising the sequence of SEQ ID NO: 8 or a variant of SEQ ID NO: 8 (for example, a variant that shares at least 70% identity with SEQ ID NO: 8) or fragment of SEQ ID NO: 8 (for example, the alpha-1 domain, or the alpha-2 domain, or about amino acid residues 29 to about 225 of SEQ ID NO: 8),

(6) of Invention VI: a polypeptide comprising either the sequence of SEQ ID NO: 10 or a variant or fragment thereof (for example, a polypeptide comprising the extracellular domains of SEQ ID NO: 10 AND specify which amino acid residues these are),

(7) of Invention VII: a nucleic acid molecule encoding a polypeptide comprising either the sequence of SEQ ID NO: 10 or a variant or fragment thereof (for example, a polypeptide comprising the extracellular domains of SEQ ID NO: 10 AND specify which amino acid residues these are),

(8) of Invention VIII: antibody specific for a polypeptide comprising the sequence of SEQ ID NO: 10 or a variant or fragment thereof (for example, a polypeptide comprising the extracellular domains of SEQ ID NO: 10 AND specify which amino acid residues these are).

The species are independent or distinct because claims to the different species recite the mutually exclusive characteristics of such species. In addition, these species are not obvious variants of each other based on the current record. These species are distinct because they have different structures and primary sequences.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

There is an examination and search burden for these patentably distinct species due to their mutually exclusive characteristics. The species require a different field of search (*e.g.,* searching different classes/subclasses or electronic resources, or employing different search queries); and/or the prior art applicable to one species would not likely be applicable to another species; and/or the species are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected species**, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

The election of the species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the election of species requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected species.

Should Applicant traverse on the ground that the species are not patentably distinct, Applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the Examiner finds one of the species unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other species.

Upon the allowance of a generic claim, Applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141.

5. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention. The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should Applicant traverse on the ground that the inventions or species are not patentably distinct, Applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. 1.48(b) and by the fee required under 37 C.F.R. 1.17(h).

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marianne DiBrino whose telephone number is 571-272-0842. The Examiner can normally be reached on Monday, Tuesday, Thursday and Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Eileen B. O'Hara, can be reached on 571-272-0878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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June 9, 2008

/G.R. Ewoldt/
Primary Examiner, Art Unit 1644